

OCULAR MOTOR NERVE PALSY - A STUDY ON THE ETIOLOGY, CLINICAL COURSE AND RECOVERY PATTERN

Abstract

AIM:

To study the frequency of the ocular motor nerves namely, 3rd, 4th and 6th cranial nerve palsies either isolated or combined and to analyse the etiological and recovery pattern of the nerve palsies and the factors influencing the recovery

MATERIALS AND METHODS:

It is a prospective study including 68 patients attending the ophthalmology OPD with either isolated or combined palsies of 3, 4 and 6th cranial nerves with the onset of palsy within one month period. The clinical diagnosis of the nerve palsies was arrived after obtaining a detailed history and a thorough CNS and ocular examination including the assessment of the lid position, pupils and degree of limitation of extra ocular movements was performed. Hematological investigations were done and neuroimaging was ordered whenever indicated. Patients were categorised into various etiological groups and were analysed with various factors. Patients were monitored for signs of recovery in function at regular intervals for a maximum of 6 months and the pattern of recovery and the factors influencing it were analysed.

RESULTS:

There was a male preponderance with 70% cases being males. The mean age of the subjects was 46.56 ± 14.28 years ranging from 9 to 74 years. Majority (94%) of the cases were unilateral. The most common age group affected was between 51-60 years. The most common presenting

symptom was diplopia (50%). Abducens nerve was the commonest nerve palsy (51.5%), followed by 3rd nerve(30.9%), multiple nerve palsy(14.7%) and trochlear nerve palsy(2.9%).The most frequent etiology observed was microvascular in nature(44.1%) followed by trauma(23.5%). Patients in the 6th decade were commonly affected by the microvascular nerve palsy. Pupil was involved in around 48% patients with 3rd nerve palsy was more common (80%) in non microvascular causes, especially traumatic and neoplastic cases.

The overall recovery rate was 83% and there was no statistically significant difference between the recovery of different nerve palsies. Patients with a small initial degree of limitation of ocular movements had a better recovery rate.

Conclusion:

Abducens nerve palsy was the most frequent and microvascular etiology was found to be the most common cause of nerve palsy followed by trauma. The overall recovery rate was 83%. Only the initial degree of limitation of movement was significantly associated with the recovery.